AMENDMENTS TO THE CLAIMS:

Claims 1-18 are pending in this application. Claims 1, 2, 4-11, and 14-17 have been amended.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A wireless LAN system comprising:

a plurality of wireless stations; and

a switching apparatus for switching a frequency channel used between stations for communication~~ed with each other~~,

the~~said~~ switching apparatus having~~including~~ a means for selecting a frequency channel ~~to be used~~, and a means for sending a switching request packet that identifies~~for specifying said~~ the selected frequency channel to the~~said~~ stations upon expiration of a polling period, each ~~of said~~ station[[s]] ~~including~~ having a means for switching a ~~current~~ frequency channel ~~to the frequency~~ from the channel being used to the channel ~~specified~~ identified by the switching request packet ~~received~~.

Claim 2 (Currently Amended): A wireless LAN system comprising:

a plurality of wireless stations; and

a switching apparatus for switching a frequency channel used between stations for

communication,

the switching apparatus having a means for selecting a frequency channel, and a means for sending a switching request packet that identifies the selected frequency channel to the stations, each station having a means for switching a frequency channel from the channel being used to the channel identified by the switching request packet, ~~A system as claimed in claim 1,~~

wherein the~~said~~ switching apparatus further comprises a manager for collecting a line status information indicating the varying status of lines between the~~said~~ stations, and a means for judging whether a frequency channel should be switched ~~switching is executed~~ based on the~~said~~ line status information;[[,]] ~~wherein~~ each ~~of said~~ station has ~~further comprises~~ an agent for sending the~~said~~ line status information to the~~said~~ manager in the~~said~~ switching apparatus;[[,]] and ~~wherein said~~ the selecting means in the~~said~~ switching apparatus selects the~~said~~ frequency channel based on a judgment of the~~said~~ judging means.

Claim 3 (Original) A system as claimed in claim 2, wherein said line status information includes information of the total number of packets and the number of error packets.

Claim 4 (Currently Amended): A system as claimed in claim 3, wherein the~~said~~ manager in the~~said~~ switching apparatus communicates with the~~said~~ agent in the~~said~~ station based on Simple Network Management Protocol.

Claim 5 (Currently Amended): A system as claimed in claim 2[[1]], wherein the~~said~~ selecting means in the~~said~~ switching apparatus selects a frequency channel so that a polarized wave of the~~said~~ frequency channel to be selected does not overlap polarized waves of neighboring frequency channels.

Claim 6 (Currently Amended): A system as claimed in claim 2[[1]], wherein the~~said~~ station further comprises a switching control means for controlling a switching of frequency channels;[[,]] ~~wherein said~~ the switching control means sends a switching confirmation packet to the stations;[[,]] ~~and~~ the switching control means receives a switching confirmation packet from ~~between said~~ stations ~~in each of which the frequency channel is switched~~ that switch frequency channels from the channel being used to the channel identified by the switching request packet in response to the~~said~~ switching request packet sent by the~~received from~~said switching apparatus;[[,]] ~~wherein~~ when the~~said~~ switching control means does not receive a switching confirmation packet from a station,~~does not be received from other station, said~~ the switching control means resets the frequency channel to a ~~previous~~ frequency channel that was being used prior to~~earlier than~~ receiving the~~said~~ switching request packet;[[,]] and ~~wherein said~~, in order to report a switching result, the switching control means sends a response packet to the switching apparatus indicating ~~of~~ whether ~~said~~ a switching confirmation packet has been received from each station~~to said switching apparatus as a switching result~~.

Claim 7 (Currently Amended): A system as claimed in claim 6, wherein when at least one of the switching results received from the stations indicates an unsuccessful frequency channel switch, the~~said~~ switching control means in the~~said~~ switching apparatus sends a switching request packet to all of the~~said~~ stations so that each~~said~~ station is reset to the ~~previous~~ frequency channel that was being used prior to~~earlier than~~ receiving a switching request packet~~, when at least one of said switching results received from said stations is unsuccessful~~.

Claim 8 (Currently Amended): A system as claimed in claim 2[[1]], wherein the~~said~~ stations consist of one parent-station and a plurality of child-stations;[[,]] ~~wherein said~~ the agent in ~~each of said~~ the parent-station and each ~~said~~ child-station[[s]] calculates~~counts~~ a percentage value of the number of success packets in relation to~~occupied in~~ the total number of packets for each wireless link between the~~said~~ parent-station and each child-station, and sends a percentage value for each wireless link to the~~said~~ switching apparatus;[[,]] ~~wherein said~~ the manager in the~~said~~ switching apparatus receives the~~said~~ percentage value;[[,]] and ~~wherein said~~ the switching judgment means judges based on the number of wireless links for which the percentage value is smaller than a threshold whether ~~said switching of~~ a frequency channel should be switched~~is executed, based on the number of the wireless links that have percentage values smaller than a threshold~~.

Claim 9 (Currently Amended): A system as claimed in claim 8, wherein the~~said~~ switching judgment means in the~~said~~ switching apparatus dynamically modifies the~~said~~ threshold based on the

number of switching times per unit time.

Claim 10 (Currently Amended): A method for a switching apparatus switching frequency channels ~~channel communicated~~ used for communication between stations for a wireless LAN ~~by a switching apparatus~~, the~~said~~ method comprising ~~comprises steps of~~:

(1) ~~in said~~ the switching apparatus[[,]] selecting a frequency channel to be used;

(2) ~~in said~~ the switching apparatus[[,]] sending a switching request packet to the stations ~~for specifying said~~ that identifies the selected frequency channel upon expiration of a polling period ~~to said station~~; and

(3) ~~in said~~ the station receiving the switching request packet, and switching ~~a current~~ from a frequency channel being used to the frequency channel ~~specified~~ identified by the switching request packet ~~received~~.

Claim 11 (Currently Amended): A method for a switching apparatus switching frequency channels used for communication between stations for a wireless LAN, the method comprising:

(1) the switching apparatus selecting a frequency channel to be used;

(2) the switching apparatus sending a switching request packet that identifies the selected frequency channel to the stations;

(3) the stations receiving the switching request packet, and switching from a frequency channel being used to the frequency channel identified by the switching request packet; ~~A method~~

~~as claimed in claim 10, wherein said method further comprises steps of:~~

(4) ~~in said~~ the switching apparatus[[,]] collecting a line status information indicating the varying status of lines between the~~said~~ stations, and judging from the line status information whether a frequency channel should be switched ~~switching is executed based on said line status information~~;

(5) ~~in said~~ the station[[,]] sending the~~said~~ line status information to the~~said~~ switching apparatus; and,

(6) ~~said selecting step in said~~ the switching apparatus in step (1) selecting[[s]] ~~said~~ the frequency channel based on a judgment of the~~said~~ judging step (4).

Claim 12 (Original): A method as claimed in claim 11, wherein said line status information includes information of the total number of packets and the number of error packets.

Claim 13 (Original): A method as claimed in claim 12, wherein said switching apparatus communicates with said station based on Simple Network Management Protocol.

Claim 14 (Currently Amended): A method as claimed in claim 11[[0]], wherein the~~said~~ selecting step (1) in the~~said~~ switching apparatus selects a frequency channel so that a polarized wave of the~~said~~ frequency channel to be selected does not overlap a polarized wave of other neighboring frequency channels.

Claim 15 (Currently Amended): A method as claimed in claim 11[[0]], wherein the~~said~~ method further comprises, ~~in said station,~~

(7) a switching control step for controlling a switching of frequency channels;[[,]] ~~wherein said switching control step~~the stations sending[[s]] each other a switching confirmation packet;[[,]] the stations receiving ~~and receives~~ a switching confirmation packet ~~between said~~ from stations that switch ~~for and in each of which the~~ frequency channels from the channel being used to the channel identified by the~~is switched in response to said~~ switching request packet received from the~~said~~ switching apparatus;[[,]] ~~wherein~~ when the~~said~~ switching confirmation packet ~~does not be~~ is not received from ~~other~~ a station, ~~said switching control step resets~~ resetting the frequency channel to a ~~previous~~ frequency channel that was being used prior to~~earlier than~~ receiving the~~said~~ switching request packet;[[,]] and, in order to report a switching result,~~wherein said switching control step sends~~ sending a response packet to the switching apparatus indicating ~~of~~ whether the~~said~~ switching confirmation packet has been received from each station ~~to said switching apparatus as a switching result~~.

Claim 16 (Currently Amended): A method as claimed in claim 15, wherein when at least one of the switching results received from the stations indicates an unsuccessful frequency channel switch, ~~said~~ the switching control step (7) ~~in said switching apparatus~~ sends a switching request packet to all of the~~said~~ stations so that each~~said~~ station is reset to the ~~previous~~ frequency channel that was being used prior to~~earlier than~~ receiving the~~said~~ switching request packet ~~again, when at least~~

~~one of said switching results received from said stations is unsuccessful~~.

Claim 17 (Currently Amended): A method as claimed in claim 1[[0]], wherein ~~said~~ the stations consist of one parent-station and a plurality of child-stations;[[,]] ~~wherein said~~ the parent-station and the~~said~~ child-stations calculate~~ount~~ a percentage value per unit time of the number of success packets ~~occupied in~~ in relation to the total number of packets for each wireless link between the~~said~~ parent-station and each ~~said~~ child-station;[[,]] ~~wherein said~~ the line status information sending step (5) sends a percentage value for each wireless link to the~~said~~ switching apparatus;[[,]] ~~wherein said~~ the switching apparatus ~~comprises steps of receiving said~~ receives percentage value;[[,]] and ~~wherein said~~ the switching judgment step judges based on the number of wireless links for which the percentage value is smaller that a threshold whether ~~said switching of~~ a frequency channel should be switched~~is executed, based on the number of the wireless links that said percentage value is smaller than a threshold~~.

Claim 18 (Original): A method as claimed in claim 17, wherein said switching judgment step in said switching apparatus dynamically modifies said threshold based on the number of switching times per unit time.